

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING	DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/648,164 08/26/2003		5/2003	Larry D. Kinsman	3396.8US (97-0696.08/US)	3536	
24247	7590	09/21/2005		EXAMINER		
TRASK BRITT				TRAN, TAN N		
P.O. BOX 2550 SALT LAKE CITY, UT 84110			ART UNIT	PAPER NUMBER		
SALI LAKE	0111, 01	01110		2826		

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK
AI

	Application No.	Applicant(s)	•
	10/648,164	KINSMAN ET AL.	
Office Action Summary	Examiner	Art Unit	
	Tan N. Tran	2826	
The MAILING DATE of this communicatio Period for Reply	n appears on the cover sheet wi	th the correspondence address	
A SHORTENED STATUTORY PERIOD FOR R WHICHEVER IS LONGER, FROM THE MAILIN - Extensions of time may be available under the provisions of 37 C after SIX (6) MONTHS from the mailing date of this communication - If NO period for reply is specified above, the maximum statutory is - Failure to reply within the set or extended period for reply will, by Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	IG DATE OF THIS COMMUNIC FR 1.136(a). In no event, however, may a re on. period will apply and will expire SIX (6) MON statute, cause the application to become AB	CATION. Exply be timely filed ITHS from the mailing date of this communication. ANDONED (35 U.S.C. § 133).	
Status			
1)⊠ Responsive to communication(s) filed on	15 August 2005.		
	This action is non-final.		
3)☐ Since this application is in condition for all		ers, prosecution as to the merits is	
closed in accordance with the practice un	der <i>Ex parte Quayle</i> , 1935 C.D	. 11, 453 O.G. 213.	
Disposition of Claims	•		
4) Claim(s) 1-24 is/are pending in the application 4a) Of the above claim(s) 12 and 13 is/are 5) Claim(s) 14-24 is/are allowed. 6) Claim(s) 1-11 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction a	withdrawn from consideration.	Minhloan Tran Primary Examiner	en
Application Papers		Art Unit 2826	
9)☐ The specification is objected to by the Exa	miner		
10) The drawing(s) filed on is/are: a)		ov the Examiner.	
Applicant may not request that any objection to			
Replacement drawing sheet(s) including the co	prrection is required if the drawing(s) is objected to. See 37 CFR 1.121(d).	
11) The oath or declaration is objected to by the	e Examiner. Note the attached	Office Action or form PTO-152.	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for for a) All b) Some * c) None of: 1. Certified copies of the priority docur 2. Certified copies of the priority docur 3. Copies of the certified copies of the application from the International But * See the attached detailed Office action for a	ments have been received. ments have been received in Ap priority documents have been ureau (PCT Rule 17.2(a)).	oplication No received in this National Stage	
Attachment(s)			
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-944) Information Disclosure Statement(s) (PTO-1449 or PTO/S Paper No(s)/Mail Date <u>08/26/03; 06/14/04</u>. 	Paper No(s	ummary (PTO-413) /Mail Date formal Patent Application (PTO-152) ·	
J.S. Patent and Trademark Office PTOL-326 (Rev. 7-05) Office	ce Action Summary	Part of Paper No./Mail Date 20050901	·

DETAILED ACTION

Election/Restriction

1. Applicant's election without traverse of Species 1, claims 1-6,9-11,14-16,19-21,24 is acknowledged.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-6,9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 4, "at least one semiconductor device including a mounting element with a receptacle" is unclear as to whether it is being referred to a package 10 including a mounting element 13 with a receptacle 17 because at least one semiconductor device 12 can not include a mounting element 13 with a receptacle 17 as shown in figs. 2,3.

In claim 9, lines 1,2, "the at least one semiconductor device includes a retainer having at least one receptacle" is unclear as to whether it is being referred to the at least one semiconductor device includes a retainer having <u>said</u> receptacle.

Application/Control Number: 10/648,164 Page 3

Art Unit: 2826

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on

sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 10,11 are rejected under 35 U.S.C. 102(b) as being anticipated by Bellomo et al.

(5,449,297).

With regard to claims 10,11, Bellomo et al. discloses a least one semiconductor device

(36,38,40) including a protection mechanism 40 and latching arms 92 serve as a mounting

element; a connector 32 serves as an alignment device including a slot 46; and the slot 46 serves

as the receptacle configured to receive at least an edge of the at least one semiconductor device

(36,38,40) with the at least one semiconductor device (36,38,40) being oriented nonparallel to a

circuit board 33 wherein the circuit board 33 serves as the carrier substrate and the connector 32

and 10

is configured to be engaged by the latching arms 92. (Note fig. 5, of Bellomo et al.).

Allowable Subject Matter

4. Claims 1-9 would be allowable if rewritten to overcome the rejection(s) under 35

U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations

of the base claim and any intervening claims.

Claims 1-9 are allowable over the prior art of record, because none of these references

Page 4

disclose or can be combined to yield the claimed invention such as at least one package including

a mounting element with a receptacle configured to receive at least a portion of the at least one

semiconductor device in nonparallel orientation relative to a carrier substrate as recited in claim

1.

5. Claims 14-24 are allowable over the prior art of record, because none of these references

disclose or can be combined to yield the claimed invention such as a retainer including including

at least one receptacle configured to receive another edge of the at least one semiconductor

device as recited in claim 14.

Conclusion

6. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Tan Tran whose telephone number is (571) 272-1923. The examiner can normally be reached on M-F 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for after final communications.

Application/Control Number: 10/648,164

Art Unit: 2826

Page 5

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

TT

Aug 2005